Department of
Environmental Protection
Bureau of Land & Water Quality August 2001

O&M Newsletter

A monthly newsletter for wastewater discharge licensees, treatment facility operators and associated persons

Fall 2001 Exam

The fall 2001 Wastewater Operator Certification Exam will be given Wednesday -- November 14, 2001 in the usual locations, South Portland, Bangor and Presque Isle. Application ***must*** be postmarked on or before Saturday, September 29, 2000 or delivered to our offices by Monday, October 1, 2001. Applications can be obtained by contacting Leslie Rucker at 287-9031 or by writing to Wastewater Operator Certification Program, Maine Department of Environmental Protection, 17 State House Station, Augusta, ME 04333-0017.

For Practice

1. Which of the following wastewater characteristics can be easily monitored on a continuous basis?
   a. BOD
   b. mercury
   c. pH
   d. coliform Bacteria

2. Part of the required maintenance for capillary or liquid thermometers includes checking for:
   a. corrosion
   b. high fluid level
   c. loose connections
   d. leaks

3. Before making a final decision, all information pertaining to the situation should be:
   a. analyzed.
   b. discussed with everyone in the plant.
   c. written down on an approved form.
   d. none of the above.

4. The wastewater treatment process which commonly uses sludge re-aeration is called:
   a. conventional activated sludge.
   b. contact stabilization.
   c. extended aeration.
   d. trickling filter.

UPCOMING TRAINING COURSES

September 13, 2001 in South Berwick, ME – Cross Connection Control - sponsored by MRWA, (207) 729-6569 - Approved for 3.5 hours.
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September 14, 2001 in Dorchester, MA – Opportunities for Urban Wetland Restoration - sponsored by NEWEA, (781) 939-0908 - Approved for 5 hours.
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September 20, 2001 in Belfast, ME – Cross Connection Control - sponsored by MRWA, (207) 729-6569 - Approved for 3.5 hours.
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September 20, 2001 in Presque Isle, ME – Care & Maintenance of Laboratory Instruments and Preparing for a Laboratory Inspection - sponsored by MRWA, (207) 729-6569 - Approved for 5 hours.
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Oct 3, 2001 in Saco, ME – Morning Session - Storm Water Pollution Prevention for Industry – sponsored by JETCC, (207) 767-2649 – Approved for 3 hours
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Oct 3, 2001 in Saco, ME – Afternoon Session - Storm Water Pollution Prevention for POTWs – sponsored by JETCC, (207) 767-2649 – Approved for 3 hours
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October 11, 2001 in Norway, ME – Cross Connection Control - sponsored by MRWA, (207) 729-6569 - Approved for 3.5 hours.
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Oct 16, 2001 in Bangor, ME - Applying Process Control Tests to WWTP Operations – sponsored by JETCC, (207) 767-2649 – Approved for 6 hours
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Oct 23 & 24, 2001 in Portland, ME - Basic Wastewater Treatment w/ Applied Math– sponsored by NEIWPCC/JETCC, (207) 767-2649 – Approved for 6 hours
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October 30, 2001 in Houlton, ME – Cross Connection Control - sponsored by MRWA, (207) 729-6569 - Approved for 3.5 hours.
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Oct 30, 2001 in Brewer, ME - Physical/Chemical Treatment in WWTF– sponsored by JETCC, (207) 767-2649 – Approved for 6 hours
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Oct. 31, 2001 in Presque Isle, ME - Pump Station Control Panel Seminar– sponsored by JETCC, (207) 767-2649 – Approved for 6 hours
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Nov 6, 2001 in Augusta, ME - Basic Chemistry– sponsored by JETCC, (207) 767-2649 – Approved for 6 hours
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Nov 28, 2001 in Presque Isle, ME - Intro to Microsoft Office 2000– sponsored by JETCC, (207) 767-2649 – Approved for 6 hours
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Nov 27, 2001 in Waterville, ME - Emerging Wet Weather Flow Issues– sponsored by NEIWPCC/JETCC, (207) 767-2649 – Approved for 6 hours
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Dec 4, 2001 – in Lincoln, ME - Basic Excel Spreadsheets with Tips for Using your E-mail Effectively – sponsored by JETCC, (207) 767-2649 – Approved for 6 hours
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Dec 6, 2001 – in Waterville, ME - Emerging Wet Weather Flow Issues – sponsored by NEIWPCC/JETCC, (207) 767-2649 – Approved for 6 hours
*****

Dec 11, 2001 in Kittery, ME - Computer Databases for the Intermediate User– sponsored by JETCC, (207) 767-2649 – Approved for 6 hours
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Answers to *For Practice:*

1. c pH can easily be monitored using an electronic probe that can, except for occasional cleaning and calibration, be used continuously. BOD, Coliform Bacteria and Mercury pretests that must be performed in a laboratory on a discrete sample

2. d All capillary thermometers contain liquid. If the liquid leaks out of the thermometer, inaccurate readings can result.

3. a Before making any final decision, all the information available should be analyzed. It may not be possible or necessary to discuss the decision with everyone at the plant and it may not necessary to write everything down on an approved form.

4. b Contact Stabilization uses a contact tank where the raw wastewater is combined with the return sludge for a short period, usually 30 minutes to 1 hour. The sludge is settled in a secondary clarifier and them pumped to a reaeration tank where is sits under aerobic conditions for 4 to 8 hours before being pumped back to the contact chamber. Conventional Activated sludge and Extended Aeration systems return the sludge directly from the clarifiers to the aeration basins without the intermediate reaeration tank. Trickling filters do not normally have any aeration basins.

Bacteria Sampling Questionnaire

Name of Facility: _____ NPDES # _____

Some of the publicly owned wastewater treatment facilities in Maine have experienced a problem with their effluent bacteria tests. This has happened mostly at the few primary treatment plants along the coast, but some secondary plants have also reported the problem. At some plants, if the bacteria samples are collected at the end of the chlorine contact tank and dechlorinated in the lab, the bacteria counts are well within permit limits. However, if the samples are taken at a point after the in-plant dechlorination tank, there are frequent bacteria violations.

A group, including operators, inspectors, engineers, and officials from the Department of Marine Resources and the DEP, have been investigating the problem and we need your help. Please complete this questionnaire as honestly as possible and return it to us by September 4, 2001. The data we collect through this questionnaire will be used only for our analysis and not for regulatory enforcement. We are trying to determine how widespread the problem is and what we might do in the way of guidelines for collecting samples for bacterial analysis.

Where do you normally collect your samples for bacterial analysis?

At the end of the chlorine contact tank, before dechlorination.

After dechlorination.

Another location. Please specify where: _____

Do you collect samples at different locations at different times of the year? yes no

Iif yes, please explain: _____

Do you collect samples at different locations if your plant is nitrifying? yes no

If yes, please explain: _____

Have you ever collected samples in different locations (for example, before and after dechlorination) to assess any differences due to sample location? yes no

If yes, please explain: _____

Please return to the DEP by September 14, 2001. ***Thank You!!***

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From: _____

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_____

Division of Engineering Compliance
and Technical Assistance
Bureau of Land and Water Quality
Maine Department of Environmental Protection
17 State House Station
Augusta, ME 04333-0017

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